

MoS₂ Polyurethane Grey (SPU)

This system is composed of prepolymers based on polyoxytetramethylene glycol (PTMEG) and diphenylmethane diisocyanate (MDI) processed liquid with catalysts and polyol. This special MoS₂ composition performs excellent in critical lubrication situations and reduces the stick-slip behaviour due to the low friction of the material.

PHYSICAL PROPERTIES

Specific gravity	DIN 53479	g/cm ³	1.15
Hardness at 20°C	DIN 53505	Shore A	95 +/-2
100% Modulus	DIN 53504	N/mm ²	>11
300% Modulus	DIN 53504	N/mm ²	>18
Tensile strength	DIN 53504	N/mm ²	>35
Elongation at break	DIN 53504	%	>560
Tear strength	DIN 53515	KN/m	130
Resilience	DIN 53512	%	49
Abrasion loss	DIN 53516	mm ³	<50
Compression set*	DIN 53517	%	26
Hardness at -5°C	DIN 53505	Shore A	95
Hardness at +80°C	DIN 53505	Shore A	93
Max. service temperature		°C	105
Min. service temperature		°C	-30

*Compression set 25% deflection 22 hours at 70°C

SURFACE SPEED

v' max. (m/s)	Temp. Range (-15°C / +70°C)	Temp. Range (-25°C/+105°C)
0.15	450 bar	400 bar
0.5	280 bar	250 bar
1	**	**

** Depending on profile, hydraulic fluid and cylinder surface we recommend max. 200 bar.

CHEMICAL RESISTANCE

Water	R
Deminerlized water	R
HFA Fluids	R
HFB Fluids	R
HFC Fluids	R
HFD Fluids	U
Mineral / vegetable oils	R
Greases	R
Alcohols	S
Diesel/Petrol	S
Petroleum products	R
Ozone	R
Butyl Acetate	U
Nitro acid 58%	U
Alkali	S
Peanut oil	R
Ethyl alcohol	U
Ethylene glycol	U
Glycerin	R
Methyl alcohol	U
Vinegar	R
White Spirit	S

KEY TO CHEMICAL RESISTANCE

R = resistance

S = suitable

U = unsuitable

ANALYSIS AND EVALUATION

The properties relate to fundamental values for polyurethane products. Values mentioned above are corresponding to the European ASTM/DIN norm and have been tested on standardized plates in the laboratory. All immersion tests in the laboratory are made on test samples under usual conditions for sealing products.